

What is claimed is:

1. A particle size distribution analyzer comprising: a transparent cell for containing a sample containing particles to be analyzed; a laser light irradiating section for irradiating the sample with laser light from outside of the cell; a scattering light intensity detecting section for detecting the intensity of light scattered from the particles irradiated with laser light; a calculating section for calculating a particle size distribution of the particles based on a fluctuation of the intensity of scattering light measured which occurs due to Brownian motions of the particles; and a noise reducing section operative to reduce the amount of noise-causing scattering light becoming incident on the scattering light intensity detecting section, the noise reducing section comprising a region to be irradiated with laser light of at least one of outside surface and inside surface of the cell, the region being inclined a predetermined angle with respect to the optical axis of laser light.

2. The particle size distribution analyzer in accordance with claim 1, wherein the scattering light intensity detecting section is configured to measure the intensity of back scattering light which travels in reverse of a direction of irradiation of laser light on the sample.